

VCS Task

Creating EC2 instance:

The screenshot shows the 'Name and tags' step of the AWS EC2 'Launch an instance' wizard. The 'Name' field contains 'GIT-VIM'. The 'Software Image (AMI)' section shows 'Amazon Linux 2023 AMI 2023.6.2...' with AMI ID 'ami-085ad6ae776d8f09c'. The 'Virtual server type (instance type)' is set to 't2.micro'. The 'Summary' section indicates 1 instance. The 'Launch instance' button is visible at the bottom right.

The screenshot shows the 'Amazon Machine Image (AMI)' selection step. It highlights the 'Ubuntu' AMI, which is selected. Below it, the 'Ubuntu Server 24.04 LTS (HVM), SSD Volume Type' is shown with AMI ID 'ami-04b4f1a9cf54c11d0'. The 'Description' section notes support for Canonical Ubuntu 24.04 LTS (HVM) and EBS General Purpose (SSD) Volume Type. The 'Architecture' dropdown is set to '64-bit (x86)'. The 'Instance type' dropdown is open, showing options like 't2.micro', 't2.small', etc. The 'Launch instance' button is visible at the bottom right.

Screenshot of the AWS EC2 'Launch an instance' wizard Step 1: Set Instance Type

Instance type: t2.micro (Free tier eligible)

Key pair (login): LINUX-KEY

Network settings: Network: vpc-07f2dc389716a7f01, Subnet: No preference (Default subnet in any availability zone)

Summary: Number of instances: 1, Software Image (AMI): Canonical, Ubuntu, 24.04, amd64, ami-04b4ff1a9cf54c11d0, Virtual server type (instance type): t2.micro, Firewall (security group): New security group, Storage (volumes): 1 volume(s) - 8 GiB

Launch instance

Screenshot of the AWS EC2 'Launch an instance' wizard Step 2: Configure Network and Security

Network settings: Network: vpc-07f2dc389716a7f01, Subnet: No preference (Default subnet in any availability zone), Auto-assign public IP: Enable

Firewall (security groups): Create security group: 'launch-wizard-3'

We'll create a new security group called 'launch-wizard-3' with the following rules:

- Allow SSH traffic from Anywhere (0.0.0.0/0)
- Allow HTTPS traffic from the internet To set up an endpoint, for example when creating a web server
- Allow HTTP traffic from the internet To set up an endpoint, for example when creating a web server

Summary: Number of instances: 1, Software Image (AMI): Canonical, Ubuntu, 24.04, amd64, ami-04b4ff1a9cf54c11d0, Virtual server type (instance type): t2.micro, Firewall (security group): New security group, Storage (volumes): 1 volume(s) - 8 GiB

Launch instance

Screenshot of the AWS CloudShell interface showing the EC2 Instance summary for instance i-025475544923498f0.

Instance summary for i-025475544923498f0 (GIT-VIM) Info

Updated less than a minute ago

Attribute	Value
Instance ID	i-025475544923498f0
IPv6 address	-
Hostname type	IP name: ip-172-31-93-176.ec2.internal
Answer private resource DNS name	IPV4 (A)
Auto-assigned IP address	54.211.83.21 [Public IP]
IAM Role	-
IMDSv2	Required
Operator	-
Public IPv4 address	54.211.83.21 open address
Instance state	Running
Private IP DNS name (IPv4 only)	ip-172-31-93-176.ec2.internal
Instance type	t2.micro
VPC ID	vpc-07f2dc389716a7f01
Subnet ID	subnet-0e07ae45177b4d083
Instance ARN	arn:aws:ec2:us-east-1:905418201986:instance/i-025475544923498f0
Private IPv4 addresses	172.31.93.176
Public IPv4 DNS	ec2-54-211-83-21.compute-1.amazonaws.com open address
Elastic IP addresses	-
AWS Compute Optimizer finding	Opt-in to AWS Compute Optimizer for recommendations Learn more
Auto Scaling Group name	-
Managed	false

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Screenshot of the AWS CloudShell interface showing the Connect to instance page for instance i-025475544923498f0.

Connect to instance Info

Connect to your instance i-025475544923498f0 (GIT-VIM) using any of these options

EC2 Instance Connect Session Manager **SSH client** EC2 serial console

Instance ID: i-025475544923498f0 (GIT-VIM)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is LINUX-KEY.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
[chmod 400 "LINUX-KEY.pem"](#)
4. Connect to your instance using its Public DNS:
[ssh -i "LINUX-KEY.pem" ubuntu@ec2-54-211-83-21.compute-1.amazonaws.com](#)

Command copied

ssh -i "LINUX-KEY.pem" ubuntu@ec2-54-211-83-21.compute-1.amazonaws.com

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel

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Connect to VM:

aws | Search [Alt+S] | United States (N. Virginia) | srikant kolluri

EC2 > Instances > i-025475544923498f0 > Connect to instance

Connect to instance Info

Connect to your instance i-025475544923498f0 (GIT-VIM) using any of these options

EC2 Instance Connect Session Manager **SSH client** EC2 serial console

Instance ID **i-025475544923498f0** (GIT-VIM)

1. Open an SSH client.
2. Locate your private key file. The key used to launch this instance is LINUX-KEY.pem
3. Run this command, if necessary, to ensure your key is not publicly viewable.
chmod 400 "LINUX-KEY.pem"
4. Connect to your instance using its Public DNS:
ec2-54-211-83-21.compute-1.amazonaws.com

Command copied

ssh -i "LINUX-KEY.pem" ubuntu@ec2-54-211-83-21.compute-1.amazonaws.com

Note: In most cases, the guessed username is correct. However, read your AMI usage instructions to check if the AMI owner has changed the default AMI username.

Cancel



Update packages:

```
ubuntu@ip-172-31-93-176:~  
Microsoft Windows [Version 10.0.26100.3037]  
(c) Microsoft Corporation. All rights reserved.  
C:\Users\mouni\cd Downloads  
C:\Users\mouni\Downloads>ssh -i "LINUX-KEY.pem" ubuntu@ec2-54-211-83-21.compute-1.amazonaws.com  
The authenticity of host 'ec2-54-211-83-21.compute-1.amazonaws.com (54.211.83.21)' can't be established.  
ED25519 key fingerprint is SHA256:p1YeHTM6f718ngbtQ2xYsJMJgW0op3VuzaVow.  
This key is not known by any other names.  
Are you sure you want to continue connecting (yes/no/[fingerprint])? yes  
Warning: Permanently added 'ec2-54-211-83-21.compute-1.amazonaws.com' (ED25519) to the list of known hosts.  
Welcome to Ubuntu 24.04.1 LTS (GNU/Linux 6.18.0-1021-aws x86_64)  
  
* Documentation: https://help.ubuntu.com  
* Management: https://landscape.canonical.com  
* Support: https://ubuntu.com/pro  
  
System information as of Sun Feb 9 15:29:55 UTC 2025  
System load: 0.19 Processes: 106  
Usage of /: 24.9% of 6.71GB Users logged in: 0  
Memory usage: 22% IPv4 address for enX0: 172.31.93.176  
Swap usage: 0%  
  
Expanded Security Maintenance for Applications is not enabled.  
0 updates can be applied immediately.  
Enable ESM Apps to receive additional future security updates.  
See https://ubuntu.com/esm or run: sudo pro status  
  
The list of available updates is more than a week old.  
To check for new updates run: sudo apt update  
  
The programs included with the Ubuntu system are free software;  
the exact distribution terms for each program are described in the  
individual files in /usr/share/doc/*/*copyright.  
Ubuntu comes with ABSOLUTELY NO WARRANTY, to the extent permitted by  
applicable law.  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
ubuntu@ip-172-31-93-176:~$
```

```
ca Select ubuntu@ip-172-31-93-176: ~  
applicable law.  
To run a command as administrator (user "root"), use "sudo <command>".  
See "man sudo_root" for details.  
ubuntu@ip-172-31-93-176:~$ sudo apt-get update  
Hit:1 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble InRelease  
Get:2 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates InRelease [126 kB]  
Get:3 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports InRelease [126 kB]  
Get:4 http://security.ubuntu.com/ubuntu noble-security InRelease [126 kB]  
Get:5 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Packages [15.0 kB]  
Get:6 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe Translation-en [5982 kB]  
Get:7 http://security.ubuntu.com/ubuntu noble-security/main amd64 Packages [618 kB]  
Get:8 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 Components [3871 kB]  
Get:9 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/universe amd64 c-n-f Metadata [301 kB]  
Get:10 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Packages [269 kB]  
Get:11 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse Translation-en [118 kB]  
Get:12 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 Components [35.0 kB]  
Get:13 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble/multiverse amd64 c-n-f Metadata [8328 B]  
Get:14 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Packages [853 kB]  
Get:15 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main Translation-en [193 kB]  
Get:16 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/main amd64 Components [1012 kB]  
Get:17 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Packages [1012 kB]  
Get:18 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe Translation-en [253 kB]  
Get:19 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 Components [362 kB]  
Get:20 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/universe amd64 c-n-f Metadata [19.9 kB]  
Get:21 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Packages [635 kB]  
Get:22 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted Translation-en [123 kB]  
Get:23 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/restricted amd64 Components [212 kB]  
Get:24 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Packages [16.3 kB]  
Get:25 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse Translation-en [3944 kB]  
Get:26 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 Components [940 kB]  
Get:27 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-updates/multiverse amd64 c-n-f Metadata [552 kB]  
Get:28 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 Components [288 B]  
Get:29 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/main amd64 c-n-f Metadata [12.8 B]  
Get:30 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe Translation-en [11.4 kB]  
Get:31 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 Components [17.6 kB]  
Get:32 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [1104 B]  
Get:33 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/universe amd64 c-n-f Metadata [316 B]  
Get:34 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [216 B]  
Get:35 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/restricted amd64 c-n-f Metadata [316 B]  
Get:36 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 Components [212 B]  
Get:37 http://us-east-1.ec2.archive.ubuntu.com/ubuntu noble-backports/multiverse amd64 c-n-f Metadata [116 B]  
Get:38 http://security.ubuntu.com/ubuntu noble-security/main Translation-en [118 kB]  
Get:39 http://security.ubuntu.com/ubuntu noble-security/main amd64 Components [8996 B]  
Get:40 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Packages [803 kB]  
Get:41 http://security.ubuntu.com/ubuntu noble-security/universe Translation-en [171 kB]  
Get:42 http://security.ubuntu.com/ubuntu noble-security/universe amd64 Components [52.0 kB]  
Get:43 http://security.ubuntu.com/ubuntu noble-security/universe amd64 c-n-f Metadata [13.5 kB]  
ubuntu@ip-172-31-93-176:~$
```

Install git

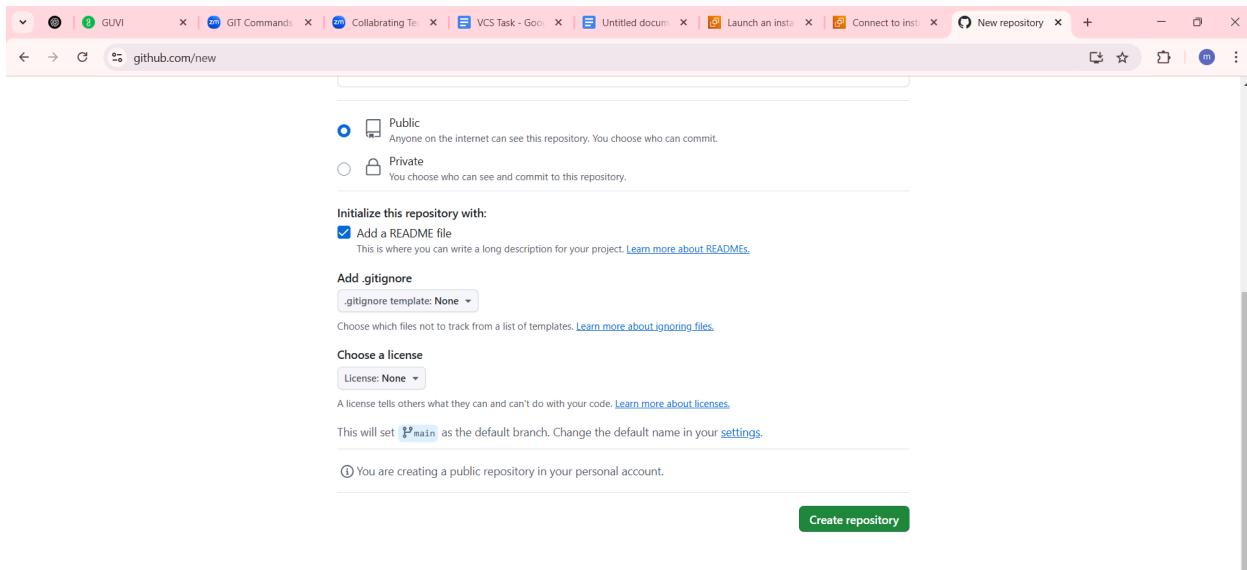
```
Reading package lists... done  
ubuntu@ip-172-31-93-176:~$ sudo apt-get install git  
Reading package lists... Done  
Building dependency tree... Done  
Reading state information... Done  
git is already the newest version (1:2.43.0-1ubuntu7.2).  
git set to manually installed.  
0 upgraded, 0 newly installed, 0 to remove and 92 not upgraded.  
ubuntu@ip-172-31-93-176:~$ git -v  
git version 2.43.0  
ubuntu@ip-172-31-93-176:~$
```

Creating Local directory TEST with file.txt and file1.txt

```
ubuntu@ip-172-31-93-176:~$ cd TEST
ubuntu@ip-172-31-93-176:~/TEST$ vi file.txt
ubuntu@ip-172-31-93-176:~/TEST$ vi file1.txt
ubuntu@ip-172-31-93-176:~/TEST$ [New] 1L, 14B written
ubuntu@ip-172-31-93-176:~/TEST$ ls
file.txt  file1.txt
ubuntu@ip-172-31-93-176:~/TEST$ cat file.txt
this is a text file
ubuntu@ip-172-31-93-176:~/TEST$ cat file1.txt
this is file1
ubuntu@ip-172-31-93-176:~/TEST$
```

Creating New repository in Git

The screenshot shows a browser window with the URL github.com/new. The page title is "New repository". The main heading is "Create a new repository". Below it, a sub-headline says "A repository contains all project files, including the revision history. Already have a project repository elsewhere? [Import a repository.](#)". A note states "Required fields are marked with an asterisk (*)." The "Owner" field is set to "MounikaKolluri14" and the "Repository name" field is "Gitproject". A note below the repository name says "Gitproject is available." Below these fields, there's a note: "Great repository names are short and memorable. Need inspiration? How about [potential-octo-chainsaw](#) ?". There is an optional "Description (optional)" field with a placeholder text area. Under "Visibility", the "Public" radio button is selected, with a note: "Anyone on the internet can see this repository. You choose who can commit.". The "Private" radio button is also present with its note: "You choose who can see and commit to this repository.". The "Initialize this repository with:" section includes a checked checkbox for "Add a README file" with a note: "This is where you can write a long description for your project. [Learn more about READMEs.](#)". Below this, there's a "Add .gitignore" section with a dropdown menu set to "None" and a note: "Choose which files not to track from a list of templates. [Learn more about ignoring files.](#)". At the bottom right of the browser window, there's a dark status bar with various icons and text: "ENG IN 21:10 09-02-2025".



The screenshot shows the GitHub repository details page for "Gitproject" owned by "MounikaKolluri14". The top navigation bar includes links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The repository name "Gitproject" is highlighted in red. The main content area shows a commit from "MounikaKolluri14" with the message "Initial commit". A file named "README.md" is shown with its content: "Gitproject". To the right of the code editor, there are buttons for Pin, Unwatch (1), Fork (0), Star (0), and a search bar. A "Clone" menu is open, showing options for Local, Codespaces, HTTPS (selected), SSH, and GitHub CLI, with the URL "https://github.com/MounikaKolluri14/Gitproject." copied to the clipboard. The "About" section notes "No description, website, or topics provided." It lists Readme, Activity, 0 stars, 1 watching, and 0 forks. The "Releases" section says "No releases published" and "Create a new release". The "Packages" section says "No packages published" and "Publish your first package". The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray indicating the date and time as 09-02-2025.

Connect git to the Local (Ec2) and moved TEST folder to Gitproject

```
ubuntu@ip-172-31-93-176:~$ git clone https://github.com/MounikaKolluri14/Gitproject.git
Cloning into 'Gitproject'...
remote: Enumerating objects: 3, done.
remote: Counting objects: 100% (3/3), done.
remote: Total 3 (delta 0), reused 0 (delta 0), pack-reused 0 (from 0)
Receiving objects: 100% (3/3), done.
ubuntu@ip-172-31-93-176:~$ ls
Gitproject  TEST
ubuntu@ip-172-31-93-176:~$ mv TEST Gitproject
ubuntu@ip-172-31-93-176:~$ ls
Gitproject
```

Checking git status

```
ubuntu@ip-172-31-93-176:~$ cd Gitproject
ubuntu@ip-172-31-93-176:~/Gitproject$ ls
README.md  TEST
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    TEST/

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Add changes: git add .

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git add .
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   TEST/file.txt
    new file:   TEST/file1.txt

ubuntu@ip-172-31-93-176:~/Gitproject$
```

Committing the changes: git commit -m "Converting the local directory into git repository"

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git commit -m "Converting the local directory into git repository"
[main e3fe6c6] Converting the local directory into git repository
Committer: Ubuntu <ubuntu@ip-172-31-93-176.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

git config --global --edit

After doing this, you may fix the identity used for this commit with:

git commit --amend --reset-author

2 files changed, 2 insertions(+)
create mode 100644 TEST/file.txt
create mode 100644 TEST/file1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Push the directory into git:

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git push origin main
Username for 'https://github.com': MounikaKolluri14
Password for 'https://MounikaKolluri14@github.com':
Enumerating objects: 6, done.
Counting objects: 100% (6/6), done.
Compressing objects: 100% (3/3), done.
Writing objects: 100% (5/5), 423 bytes | 423.00 KiB/s, done.
Total 5 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/MounikaKolluri14/Gitproject.git
 ba2dd21..e3fe6c6  main -> main
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Test Folder added to the Git:

The screenshot shows a GitHub repository page for 'Gitproject'. The repository is public and has 2 commits. The README file contains the text 'Gitproject'. The repository has 0 stars, 0 forks, and 0 releases.

Commits

Author	Message	Time
Ubuntu	Converting the local directory into git repository	11 minutes ago
TEST	Converting the local directory into git repository	11 minutes ago
README.md	Initial commit	19 minutes ago

README

Gitproject

About

No description, website, or topics provided.

Readme

Activity

0 stars
1 watching
0 forks

Releases

No releases published
[Create a new release](#)

Packages

No packages published
[Publish your first package](#)

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The screenshot shows a GitHub repository page for 'Gitproject/tree/main/TEST'. The repository has 2 commits. The TEST folder contains 'file.txt' and 'file1.txt'. The README file contains the text 'Gitproject / TEST /'.

Commits

Author	Message	Time
Ubuntu	Converting the local directory into git repository	12 minutes ago
TEST	Converting the local directory into git repository	12 minutes ago
file1.txt	Converting the local directory into git repository	12 minutes ago
file.txt	Converting the local directory into git repository	12 minutes ago

TEST

file.txt
file1.txt
README.md

Gitproject / TEST /

History

ENG IN 21:31 09-02-2025

Creating new branch “feature-branch” and switch to it

```
nothing to commit, working tree clean
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch feature-branch
ubuntu@ip-172-31-93-176:~/Gitproject$ git checkout feature-branch
Switched to branch 'feature-branch'
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
* feature-branch
  main
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Created a file in feature-branch and created test1.txt file

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch feature-branch
ubuntu@ip-172-31-93-176:~/Gitproject$ git checkout feature-branch
Switched to branch 'feature-branch'
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
* feature-branch
  main
ubuntu@ip-172-31-93-176:~/Gitproject$ touch test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch feature-branch
Untracked files:
  (use "git add <file>..." to include in what will be committed)
    test1.txt

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Added and committed the change:

```
nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-93-176:~/Gitproject$ git add .
ubuntu@ip-172-31-93-176:~/Gitproject$ git commit -m "Added file in feature-branch"
[feature-branch 0747b4d] Added file in feature-branch
Committer: Ubuntu <ubuntu@ip-172-31-93-176.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:
```

```
git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
1 file changed, 0 insertions(+), 0 deletions(-)
create mode 100644 test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Merge:

Now switch to the main branch and merge the commit into main branch:

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git checkout main
Switched to branch 'main'
Your branch is up to date with 'origin/main'.
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
  feature-branch
* main
ubuntu@ip-172-31-93-176:~/Gitproject$ git merge feature-branch
Updating e3fe6c6..0747b4d
Fast-forward
  test1.txt |  0
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$
```

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
  feature-branch
* main
ubuntu@ip-172-31-93-176:~/Gitproject$ git merge feature-branch
Updating e3fe6c6..0747b4d
Fast-forward
  test1.txt |  0
  1 file changed, 0 insertions(+), 0 deletions(-)
  create mode 100644 test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git push origin main
Username for 'https://github.com': MounikaKolluri14
Password for 'https://MounikaKolluri14@github.com':
Enumerating objects: 4, done.
Counting objects: 100% (4/4), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 325 bytes | 325.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/MounikaKolluri14/Gitproject.git
  e3fe6c6..0747b4d  main -> main
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Git repo updated by test file:

The screenshot shows a GitHub repository named 'Gitproject'. The repository has one branch, 'main', and no tags. It contains three commits:

- Ubuntu: Added file in feature-branch (0747b4d, 7 minutes ago)
- TEST: Converting the local directory into git repository (33 minutes ago)
- Initial commit: README.md (41 minutes ago)

The README file content is:

```
Gitproject
```

On the right side of the page, there are sections for 'About', 'Releases', and 'Packages'. The 'About' section notes 'No description, website, or topics provided.' The 'Releases' section says 'No releases published' and 'Create a new release'. The 'Packages' section says 'No packages published' and 'Publish your first package'.

At the bottom of the page, there is a footer with links to GitHub's Terms, Privacy, Security, Status, Docs, Contact, Manage cookies, and a 'Do not share my personal information' link. The status bar at the bottom of the screen shows system icons, language settings (ENG IN), and the date/time (09-02-2025).

Git Stash:

In the Main branch created abc.txt and xyz.txt files

Then add files to the staging

Added to the stash

git add . → git status → git stash

git status: there was no changes to be commit

```
git checkout main
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
  feature-branch
* main
ubuntu@ip-172-31-93-176:~/Gitproject$ touch abc.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ touch xyz.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

Untracked files:
  (use "git add <file>..." to include in what will be committed)
    abc.txt
    xyz.txt

nothing added to commit but untracked files present (use "git add" to track)
ubuntu@ip-172-31-93-176:~/Gitproject$ git add .
ubuntu@ip-172-31-93-176:~/Gitproject$ git stash
Saved working directory and index state WIP on main: 0747b4d Added file in feature-branch
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch main
Your branch is up to date with 'origin/main'.

nothing to commit, working tree clean
ubuntu@ip-172-31-93-176:~/Gitproject$
```

By stash changes do not track by git and will listed into stash list

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git stash list
stash@{0}: WIP on main: 0747b4d Added file in feature-branch
ubuntu@ip-172-31-93-176:~/Gitproject$
```

We can get back them into staging by the pop command: git stash pop

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
  feature-branch
* main
ubuntu@ip-172-31-93-176:~/Gitproject$ git stash pop
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   abc.txt
    new file:   xyz.txt

Dropped refs/stash@{0} (dc00e82219901544c1436fc39a2f0169d8b66cff)
ubuntu@ip-172-31-93-176:~/Gitproject$
```

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git stash pop
On branch main
Your branch is up to date with 'origin/main'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
    new file:   abc.txt
    new file:   xyz.txt

Dropped refs/stash@{0} (dc00e82219901544c1436fc39a2f0169d8b66cff)
ubuntu@ip-172-31-93-176:~/Gitproject$ git commit -m "abc.txt and xyz.txt files into the main branch"
[main c7ca4d9] abc.txt and xyz.txt files into the main branch
Committer: Ubuntu <ubuntu@ip-172-31-93-176.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

  git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author

2 files changed, 0 insertions(+), 0 deletions(-)
create mode 100644 abc.txt
create mode 100644 xyz.txt
```

Here we don't have abc,xyz files in the repository before push

The screenshot shows a GitHub repository named 'Gitproject'. The repository has three commits:

- 'TEST' - Converting the local directory into git repository, 52 minutes ago
- 'README.md' - Initial commit, 1 hour ago
- 'test1.txt' - Added file in feature-branch, 26 minutes ago

The 'README' file is open in the code editor, showing the text 'Gitproject'.

On the right side of the page, there is an 'About' section with the message: "No description, website, or topics provided." It also shows statistics: 0 stars, 1 watching, and 0 forks.

Below the repository details, there are sections for 'Releases' (No releases published) and 'Packages' (No packages published).

At the bottom of the page, there is a footer with links to GitHub's Terms, Privacy, Security, Status, Docs, Contact, Manage cookies, and a link to 'Do not share my personal information'.

The screenshot is taken from a Windows desktop, as evidenced by the taskbar at the bottom showing various application icons like File Explorer, Task View, and Google Chrome.

Push the commits to repository

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git push origin main
Username for 'https://github.com': MounikaKolluri14
Password for 'https://MounikaKolluri14@github.com':
Enumerating objects: 3, done.
Counting objects: 100% (3/3), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (2/2), 344 bytes | 344.00 KiB/s, done.
Total 2 (delta 0), reused 0 (delta 0), pack-reused 0
To https://github.com/MounikaKolluri14/Gitproject.git
    0747b4d..c7ca4d9  main -> main
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Files Moved to the git Repository:

The screenshot shows a GitHub repository named 'Gitproject'. The repository has one branch ('main') and no tags. It contains several commits: 'TEST' (initial commit), 'README.md', 'abc.txt', 'test1.txt', and 'xyz.txt'. The 'README' file is visible with the text 'Gitproject'. The GitHub interface shows basic statistics like 1 star, 0 forks, and 4 commits.

Git Rebase:

As above abc.txt and xyz files are not exist in the feature-branch

```
git clone https://github.com/MounikaKolluri14/Gitproject.git
0747b4d..c7ca4d9 main -> main
ubuntu@ip-172-31-93-176:~/Gitproject$ ls
README.md TEST abc.txt test1.txt xyz.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git checkout feature-branch
Switched to branch 'feature-branch'
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
* feature-branch
  main
ubuntu@ip-172-31-93-176:~/Gitproject$ ls
README.md TEST test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$
```

We can get those files into feature-branch by rebase

Git rebase command will fetch the latest changes into the feature-branch

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git branch
* feature-branch
  main
ubuntu@ip-172-31-93-176:~/Gitproject$ ls
README.md  TEST  test1.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git rebase main
Successfully rebased and updated refs/heads/feature-branch.
ubuntu@ip-172-31-93-176:~/Gitproject$ ls
README.md  TEST  abc.txt  test1.txt  xyz.txt
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Now i am pushing the changes to the git repository into feature branch

```
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch feature-branch
nothing to commit, working tree clean
ubuntu@ip-172-31-93-176:~/Gitproject$ vi abc.txt
ubuntu@ip-172-31-93-176:~/Gitproject$ git status
On branch feature-branch
Changes not staged for commit:
  (use "git add <file>..." to update what will be committed)
  (use "git restore <file>..." to discard changes in working directory)
    modified:   abc.txt

no changes added to commit (use "git add" and/or "git commit -a")
ubuntu@ip-172-31-93-176:~/Gitproject$ git add .
ubuntu@ip-172-31-93-176:~/Gitproject$ git commit -m "abc"
[feature-branch a8342a6] abc
  Committer: Ubuntu <ubuntu@ip-172-31-93-176.ec2.internal>
Your name and email address were configured automatically based
on your username and hostname. Please check that they are accurate.
You can suppress this message by setting them explicitly. Run the
following command and follow the instructions in your editor to edit
your configuration file:

  git config --global --edit
```

After doing this, you may fix the identity used for this commit with:

```
git commit --amend --reset-author
```

```
1 file changed, 1 insertion(+)
```

Here we only have main branch

The screenshot shows a GitHub repository named 'Gitproject'. The repository has one branch, 'main', and no tags. The 'Code' tab is selected. The repository page shows a commit history with four commits. The first commit converts the local directory into a git repository. The second commit is an initial commit. The third commit adds 'abc.txt' and 'xyz.txt' files to the main branch. The fourth commit adds a file in the feature-branch. The README file contains the text 'Gitproject'.

Now push the feature-branch changes:

```
1 file changed, 1 insertion(+)
ubuntu@ip-172-31-93-176:~/Gitproject$ git pull feature-branch
fatal: 'feature-branch' does not appear to be a git repository
fatal: Could not read from remote repository.

Please make sure you have the correct access rights
and the repository exists.
ubuntu@ip-172-31-93-176:~/Gitproject$ git push origin feature-branch
Username for 'https://github.com': MounikaKolluri14
Password for 'https://MounikaKolluri14@github.com':
Enumerating objects: 5, done.
Counting objects: 100% (5/5), done.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 269 bytes | 269.00 KiB/s, done.
Total 3 (delta 1), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (1/1), completed with 1 local object.
remote:
remote: Create a pull request for 'feature-branch' on GitHub by visiting:
remote:     https://github.com/MounikaKolluri14/Gitproject/pull/new/feature-branch
remote:
To https://github.com/MounikaKolluri14/Gitproject.git
 * [new branch]      feature-branch -> feature-branch
ubuntu@ip-172-31-93-176:~/Gitproject$
```

Here we can see the feature-branch pull request:

The screenshot shows a GitHub repository named "Gitproject". A yellow banner at the top indicates that "feature-branch" had recent pushes 2 seconds ago. On the right, there's a "Compare & pull request" button. Below the banner, the repository structure is shown with "main" (1 Branch, 0 Tags) and a list of commits:

- Ubuntu abc.txt and xyz.txt files into the main branch c7ca4d9 · 26 minutes ago 4 Commits
- TEST Converting the local directory into git repository 1 hour ago
- README.md Initial commit 1 hour ago
- abc.txt abc.txt and xyz.txt files into the main branch 26 minutes ago
- test1.txt Added file in feature-branch 50 minutes ago
- xyz.txt abc.txt and xyz.txt files into the main branch 26 minutes ago

On the left, there's a "README" section. To the right, there are sections for "About" (no description, website, or topics provided), "Releases" (no releases published, Create a new release), and "Packages" (no packages published, Publish your first package). The bottom of the screen shows a Windows taskbar with various icons.

Click on compare & pull request

The screenshot shows the "Comparing" page for the "Gitproject" repository, specifically comparing the "main" branch against the "feature-branch". The top bar shows the URL "github.com/MounikaKolluri14/Gitproject/compare/feature-branch?expand=1". The page includes fields for "base: main" and "compare: feature-branch", and a note that "Able to merge". Below this, there are sections for "Add a title" (with "abc" entered), "Add a description" (with a rich text editor and "Markdown is supported"), and "Create pull request" (a large green button). To the right, there are settings for "Reviewers" (no reviews), "Assignees" (no one assigned), "Labels" (none yet), "Projects" (none yet), and "Milestone" (no milestone). At the bottom, there are "Development" notes about closing keywords and "Helpful resources" linking to GitHub Community Guidelines. The bottom of the screen shows a Windows taskbar with various icons.

Click on create pull request:

The screenshot shows a GitHub pull request page for a repository named 'Gitproject'. The pull request is titled 'abc #1' and is currently 'In progress'. It has one commit from 'feature-branch' into 'main'. A comment from 'MounikaKolluri14' says 'No description provided.' Below the commit, a message says 'Checking for ability to merge automatically...'. On the right side, there are sections for 'Reviewers', 'Assignees', 'Labels', 'Projects', and 'Milestone', all of which are currently empty. At the bottom, there is a 'Merge pull request' button.

Click on Merge request :

This screenshot is identical to the previous one, showing the same GitHub pull request page for 'Gitproject'. The pull request is still 'In progress' with one commit. The 'Checking for ability to merge automatically...' message is still present. However, the merge interface now includes several merge rules: 'Require approval from specific reviewers before merging', 'Continuous integration has not been set up', and 'This branch has no conflicts with the base branch'. The 'Merge pull request' button is at the bottom.

Click on Confirm merge:

The screenshot shows a GitHub pull request page for repository 'Gitproject'. The pull request is titled 'abc #1' and is from user 'MounikaKolluri14' into branch 'main'. The status is 'Open'. A comment from 'MounikaKolluri14' says 'No description provided.' Below the comment is a commit message 'abc'. A modal dialog box is open, prompting the user to 'Merge pull request #1 from MounikaKolluri14/feature-branch'. It contains the commit message 'abc' and two buttons: 'Confirm merge' (highlighted in green) and 'Cancel'. To the right of the dialog are review, assignee, label, project, milestone, and development settings. The GitHub interface includes a navigation bar with tabs like Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The bottom of the screen shows a Windows taskbar with various icons and system status.

The screenshot shows the same GitHub pull request page after the merge. The status is now 'Merged'. A message indicates 'MounikaKolluri14 merged 1 commit into main from feature-branch now'. Below this, another message shows 'MounikaKolluri14 merged commit ae1a3b8 into main now'. A success message at the bottom states 'Pull request successfully merged and closed. You're all set—the feature-branch branch can be safely deleted.' There is also a 'Delete branch' button. The right side of the screen shows the same review and development settings as before. The GitHub interface and taskbar are identical to the previous screenshot.

Now we can see feature-branch:

https://github.com/MounikaKolluri14/Gitproject/tree/feature-branch

Main branch:

https://github.com/MounikaKolluri14/Gitproject/commits/main

Feature-branch:

The screenshot shows a Windows desktop environment. At the top, there is a taskbar with various pinned icons and a system tray showing the date as 09-02-2025 and time as 22:52. The main window is a web browser displaying a GitHub repository page. The URL in the address bar is `github.com/MounikaKolluri14/Gitproject/commits/feature-branch`. The page title is "Commits" under the "Gitproject" repository. A dropdown menu shows "feature-branch". Filter options "All users" and "All time" are also visible. The commit history lists five entries:

- abc** (Ubuntu committed 21 minutes ago) - Commit hash: a8342a6
- abc.txt and xyz.txt files into the main branch** (Ubuntu committed 43 minutes ago) - Commit hash: c7ca4d9
- Added file in feature-branch** (Ubuntu committed 1 hour ago) - Commit hash: 0747b4d
- Converting the local directory into git repository** (Ubuntu committed 1 hour ago) - Commit hash: e3fe6c6
- Initial commit** (MounikaKolluri14 authored 1 hour ago) - Commit hash: ba2dd21, Verified

Both commits in sync